

Calston

CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA

Oct. 26, 1947

Dear Josh,

It was certainly gratifying to receive your letter and to know that you got the position at Wisconsin which you wanted. Actually, I had known about your appointment at Wisconsin for some time (perhaps even before you were informed of it!).. I can assure you that I had to submit to long questionnaires delivered by various Wisconsin talent scouts concerning one J. Lederberg. I answered them all as honestly as I could, which meant of course that I gave you quite a build-up. Everyone here is extremely glad that you have gotten the job, and ~~is~~ all are hoping for a steady stream of good work to flow out of your new lab.

Our situation at Caltech is really quite fine. In the first place, we succeeded in locating a cute little house for rent. This made it unnecessary for us to buy the prefab. which we had contemplated acquiring, more or less willy-nilly. By not buying at this time, we avoided paying an exorbitant price, we saved the GI bill loan for a better house sometime in the future, and we left ourselves with the mobility which one needs in order to get around sufficiently and to finally get a job which satisfies all one's personal requirements. As much as I like Caltech (and I do like it a lot), I am still not convinced that I want to settle down here.... Of course, a really good, solid offer would help me make up my mind.

I have fallen heir to one of the best labs in the Building. We have loads of money for equipment of all sorts, and I have managed to stock the lab with every conceivable useful gadget. In addition, I have a very competent full time research assistant, who is of inestimable aid in keeping my asparagus project going. I have drawn the staggering teaching load of three weeks of teaching during the entire school year.... These three weeks are now over, and I may look forward to uninterrupted work from now on out.

My main project continues to be chasing two hormones which greatly influence plant morphogenesis (wouldn't that word delight old Papa Sinnott's heart?). With regard to florigen, progress continues to be slow, but exciting. I have recently gotten some very good leads on rhizocaline, which I am now hitting hard. I am also getting further data on indoleacetic-nicotinic relationships in plants... and this is turning out to be rather interesting.. You see, tryptophane can certainly be converted to indoleacetic by most plants, and it can also be converted to nico/tinic by some. Since the former inhibits lateral bud growth and the latter stimulates it, we have here the spectacle of one compound being able to produce two vastly different effects, depending on which of the transformations is predominant. In the pea, for instance, one may reverse effects due to IAA by high concentrations of nicotinamide, and may reverse the effect of the latter by high concentrations of the former.. so it looks like the relative concentrations of these two substances may be extremely important in the control of plant development.

Despite the exciting atmosphere in plant physiology, there is no doubt that genetics is king at Caltech. During the last week, we had lectures by Beadle, Delbruck and Sonneborn... which I would regard as a rather elite crew. I have maintained rather close contact with

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all of the geneticists, especially Mitchell, whom I regard as an extraordinarily bright and capable chap. Incidentally, Mitchell and some of his coworkers have solved the nicotinic intermediate problem.... This will certainly be a bitter pill for Dave to swallow, but will perhaps serve to divert him to other problems more befitting his attention. Incidentally, ^{my}Hershey is coming here starting sometime in January, to work with Delbruck for about 6 months. Delbruck gave such a damned inspiring talk that I was almost tempted to join his group myself.

One other project which I have been contemplating is the writing of a decent, epitomized text in plant physiology. Dr. Bonner and I have been approached by several publishers, and are seriously considering biting at some of the bait which they are dangling before us. The only trouble is that this will only serve to divert some time from research.... and this is of course a pity.

I hope that you are by this time well ensconced in a decent house, and are on your way toward getting a lab into shape for productive labor. Let us hear from you frequently.....and send along any reprints that you have.

Dale and Billy join in sending best regards to Esther and yourself.

Sincerely —
Art.

Hope to see you in Chicago!

6/4/51